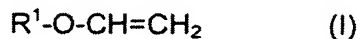


We claim:

1. A process for distillatively separating a mixture containing a vinyl ether of the general formula (I)

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and alcohol of the general formula (II)

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in which R^1 and R^2 are each independently a saturated or unsaturated, aliphatic or cycloaliphatic radical having from 2 to 10 carbon atoms, and in which the alcohol (II) has a boiling point which is at least 1°C higher, measured at or extrapolated to 0.1 MPa abs, than the vinyl ether (I), which comprises

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- a) passing the mixture into a first distillation column and withdrawing, as a top product, an azeotrope containing vinyl ether (I) and alcohol (II) and, as a bottom product, a stream enriched with the alcohol (II);
- b) passing the azeotrope containing vinyl ether (I) and alcohol (II) from the first distillation column into a second distillation column which is operated at a pressure which is from 0.01 to 3 MPa higher compared to the first distillation column, and withdrawing, as a bottom product or gaseous sidestream in the stripping section, the vinyl ether (I) and, as a top product, an azeotrope containing vinyl ether (I) and alcohol (II); and
- c) recycling the azeotrope containing vinyl ether (I) and alcohol (II) from the second distillation column into the first distillation column.

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2. A process as claimed in claim 1, wherein the second distillation column is operated at a pressure, measured at the top of the column, which is from 0.1 to 2 MPa higher than the first distillation column.
3. A process as claimed in either of claims 1 to 2, wherein the first distillation column is operated at a temperature of from 75 to 225°C, measured in the bottom of the column, and a pressure of from 0.01 to 1 MPa abs, measured at the top of the column.

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4. A process as claimed in any of claims 1 to 3, wherein the second distillation column is operated at a temperature of from 75 to 225°C, measured in the bottom of the column.
- 5 5. A process as claimed in any of claims 1 to 4, wherein the vinyl ether (I) is withdrawn as a gaseous sidestream in the stripping section of the second distillation column in the region of the lower 25% of the total number of theoretical plates.
- 10 6. A process as claimed in any of claims 1 to 5, wherein the vinyl ether (I) withdrawn from the second distillation column as a bottom product or gaseous sidestream in the stripping section is passed into a purifying distillation column and the purified vinyl ether (I) is obtained therefrom as a top product.
- 15 7. A process as claimed in any of claims 1 to 6, wherein a mixture containing vinyl ether (I) and alcohol (II) is used in which the R¹ and R² radicals are each independently a C₂- to C₄-alkyl radical.
- 20 8. A process as claimed in any of claims 1 to 7, wherein a mixture containing vinyl ether (I) and alcohol (II) is used in which the R¹ and R² radicals are identical.
- 25 9. A process as claimed in claim 8, wherein the mixture used which contains vinyl ether (I) and alcohol (II) stems from the vinyl ether synthesis by reacting the alcohol (II) with ethyne in the presence of a basic alkali metal or alkaline earth metal compound, distillatively removing low boilers and high boilers from the bottom product enriched with the alcohol (II) in the first distillation column and recycling the purified alcohol (II) back to the vinyl ether synthesis.
- 30 10. A process as claimed in claim 9, wherein the distillative removal of low boilers and high boilers from the bottom product enriched with the alcohol (II) in the first distillation column is carried out in a dividing wall column or an arrangement of distillation columns having heat and/or mass transfer.